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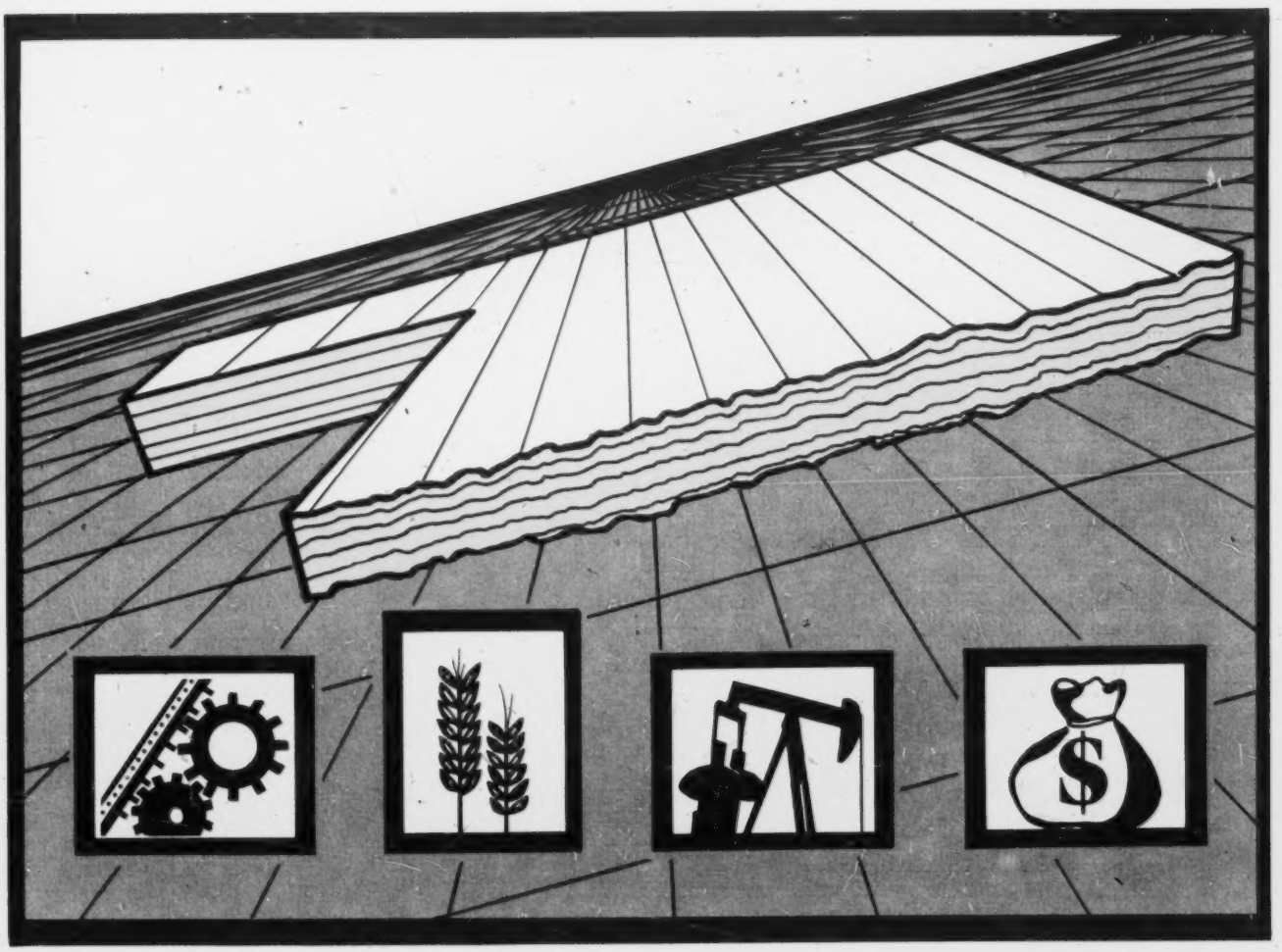

The *Oklahoma Business Bulletin* is now combined with the *Review of Regional Economics and Business*. There will be four quarterly expanded editions of the *Bulletin* which will contain both articles and the usual statistical information on Oklahoma and its major centers. The remaining eight monthly issues of the *Bulletin* will contain only the statistical summaries, although articles on timely subjects might also appear in these interquarterly issues. The combination of these two publications will provide a more thorough examination of economic problems prevalent in Oklahoma as well as continuing to provide economic data which has long been presented in the *Oklahoma Business Bulletin*.

This publication change at the Center has been assisted by funding provided by the Robert S. and Grayce B. Kerr Foundation Inc., for which the Center is most grateful.

We at the Center are most hopeful that the Oklahoma oriented articles will assist State leaders and citizens in their efforts to solve the economic problems now facing the State.

George W. England
Director

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SUMMARY OF INDICATORS

Category	3 Mos. '88	3 Mos. '87	Mar. '88	Percentage Change 3 Mos. '88/'87	Percentage Change Mar./Feb. '88
Personal Income (Monthly Average)					
Unadjusted ($000,000)	3,506	3,392	3,533	3.4	0.7
Adjusted for CPI ($000,000)	3,009	3,039	3,033	-1.0	0.3
Crude Oil Production (000 bbl)	32,993	33,631	11,018	-1.9	0.4
Industrial Power Sales (000,000 Kwh)[a]	2,022	1,928	665	4.9	-0.4
Total Bank Deposits (Monthly Average) ($000,000)[b]					
Demand	7,561	7,534	7,472	0.4	-0.6
Savings	24,613	26,066	24,625	-5.6	0.1
Savings and Loan Associations ($000,000)					
Assets	10,229	9,942	10,287	2.9	0.8
Mortgage Loans Closed	129	240	54	-46.3	35.8
General Business Index	95.5	93.1	96.1	2.6	0.2

Note: Includes revisions.

[a]Sales of larger privately owned utility companies.

[b]Total deposits of all depository institutions.

SELECTED ECONOMIC INDICATORS

Category	3 Mos. '88	3 Mos. '87	Mar. '88	Percentage Change 3 Mos. '88/'87	Percentage Change Mar./Feb. '88
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	63,491	75,275	30,056	-15.7	46.4
Number of Units	851	1,155	387	-26.3	34.8
Residential—Multi Family					
Dollar Value ($000)	636	11,473	116	-94.5	-72.7
Number of Units	37	505	18	-92.7	28.6
Nonresidential					
Commercial ($000)	19,694	44,640	8,508	-55.9	156.0
Industrial ($000)	9,776	2,832	60	245.2	-95.1
Institutional ($000)	8,330	9,441	3,948	-11.8	30.7
Nonbuilding					
Streets and Highways ($000)	102,145	51,329	41,647	99.0	57.5
All Other Nonbuilding ($000)	994	1,235	680	-19.4	276.5
Total Construction ($000)	205,067	196,224	85,015	4.5	54.2
EMPLOYMENT TRENDS					
Total Labor Force (000)[a]	1,525.3	1,568.8	1,525.2	-2.8	0.1
Total Employment (000)	1,416.6	1,433.5	1,420.5	-1.2	0.2
Manufacturing (000)	154.7	154.0	154.6	0.5	-1.1
Mining (000)	44.1	45.6	44.2	-3.3	1.4
Government (000)	249.2	250.5	252.6	-0.5	0.7
Contract Construction (000)	30.2	32.8	31.3	-7.9	2.6
Services (000)	229.4	226.7	231.3	1.2	0.2
Retail Trade (000)	202.2	208.0	202.4	-2.8	0.5
Unemployment Rate (%)	7.1	8.6	6.9	—	—
Average Weekly Hours					
Manufacturing (Per Worker)	40.8	41.3	40.4	-1.2	-1.2
Average Weekly Earnings					
Manufacturing ($ Per Worker)	419.51	408.81	414.10	2.6	-0.8
Contract Construction ($ Per Worker)	408.50	416.24	419.34	-1.9	2.6
Retail Trade Excluding Eating and Drinking Places ($ Per Worker)	186.10	188.32	187.17	-1.2	0.8

Note: Includes revisions in some previous months. Streets and highways data reflect construction started in current month(s).

[a]Civilian Labor Force.

RETAIL TRADE IN METRO AREAS AND STATE
($000)

Retail Trade	3 Mos. '88 Adjusted	3 Mos. '87 Adjusted	Mar. '88 Adjusted	Mar. '88 Unadjusted	Percentage Change 3 Mos. '88/'87 Adjusted	Percentage Change Mar./Apr. '88 Adjusted	Percentage Change Mar./Apr. '88 Unadjusted
OKLAHOMA CITY MSA							
Food	567,905	553,197	188,568	191,445	2.7	-1.2	6.1
Apparel	46,042	46,049	16,542	16,796	-0.0	12.9	46.7
General Merchandise	192,753	174,980	56,389	51,727	10.2	-11.9	0.4
Furniture	56,781	64,741	18,576	16,289	-12.3	-6.1	-10.3
Lumber	42,832	40,961	13,195	13,393	4.6	-21.3	4.0
Auto Dealers	439,347	400,758	118,182	106,615	9.6	-22.6	-28.4
Service Stations	48,850	52,114	16,920	14,951	-6.3	2.1	1.0
All Other	210,790	183,676	59,744	57,742	14.8	-19.5	7.9
Total	1,605,300	1,516,476	488,116	468,958	5.9	-11.2	-4.6
TULSA MSA							
Food	324,764	327,784	108,520	109,872	-0.9	2.2	9.3
Apparel	44,756	42,311	13,897	13,285	5.8	0.2	25.9
General Merchandise	171,887	139,783	57,236	55,101	23.0	12.2	37.7
Furniture	39,654	34,386	16,140	14,922	15.3	32.1	31.6
Lumber	32,114	35,373	10,173	10,106	-9.2	-12.9	11.1
Auto Dealers	255,635	233,185	68,765	62,033	9.6	-22.6	-28.4
Service Stations	40,134	42,812	13,901	12,283	-6.3	2.1	1.0
All Other	38,955	43,483	12,019	11,969	-10.4	-28.2	5.1
Total	947,899	899,117	300,651	289,571	5.4	-4.3	2.8
ENID MSA							
Food	26,375	27,092	8,218	8,060	-2.6	-9.2	-3.6
Apparel	4,062	4,394	1,304	1,296	-7.6	-9.4	5.1
General Merchandise	13,050	11,799	3,991	3,755	10.6	0.6	28.2
Furniture	3,163	3,204	968	936	-1.3	-14.3	-13.0
Lumber	3,733	3,802	1,171	1,133	-1.8	-7.7	25.1
Auto Dealers	25,146	22,936	6,764	6,102	9.6	-22.6	-28.4
Service Stations	3,601	3,843	1,247	1,102	-6.3	2.0	1.0
All Other	9,255	9,588	3,156	2,667	-3.5	6.8	22.3
Total	88,385	86,658	26,819	25,051	2.0	-9.9	-4.7
LAWTON MSA							
Food	46,676	48,246	13,811	14,134	-3.3	-15.6	-7.4
Apparel	5,458	5,703	1,790	1,785	-4.3	-6.2	20.3
General Merchandise	38,515	34,934	14,466	13,531	10.3	28.0	43.6
Furniture	7,079	6,457	2,064	2,081	9.6	-18.8	-14.7
Lumber	4,402	4,718	1,569	1,535	-6.7	-1.2	21.2
Auto Dealers	33,510	30,568	9,014	8,132	9.6	-22.6	-28.4
Service Stations	2,459	2,622	851	752	-6.2	1.9	0.9
All Other	10,549	12,018	4,104	4,120	-12.2	39.0	78.1
Total	148,648	145,263	47,669	46,070	2.3	-3.0	4.0
MUSKOGEE AREA							
Food	31,599	34,717	10,341	10,221	-9.0	3.0	10.5
Apparel	4,832	5,104	1,599	1,665	-5.3	-4.3	28.6
General Merchandise	12,144	9,599	4,035	3,827	26.5	6.0	39.9
Furniture	3,153	3,173	1,343	1,163	-0.6	57.8	54.4
Lumber	1,101	1,366	387	380	-19.4	0.5	27.9
Auto Dealers	21,133	19,280	5,684	5,129	9.6	-22.6	-28.4
Service Stations	3,165	3,383	1,108	963	-6.4	3.7	1.0
All Other	9,983	9,619	2,857	2,785	3.8	-17.3	20.8
Total	87,110	86,241	27,354	26,133	1.0	-4.4	5.6
STATE[a]							
Durable Goods	1,559,547	1,452,854	447,367	411,460	7.3	-17.2	-18.7
Auto Dealers	1,097,666	1,001,464	295,264	266,374	9.6	-22.6	-28.4
Accessory Dealers	84,290	82,562	28,739	27,860	2.1	2.2	19.5
Total Automotive	1,181,956	1,084,026	324,003	294,234	9.0	-20.9	-25.6
Furniture	91,200	86,788	32,534	32,217	5.1	3.6	17.2
Household Appliances	63,304	59,249	20,043	18,532	6.8	-1.9	1.0
Total Furniture and Appliances	154,504	146,037	52,577	50,749	5.8	1.4	10.7
Lumber and Building Materials	132,643	137,488	42,663	42,362	-3.5	-10.6	15.4
Hardware Stores	17,057	15,615	5,550	5,440	9.2	-1.2	22.8
Total Lumber, Building Materials & Hardware	149,700	153,103	48,213	47,802	-2.2	-9.6	16.2
Nondurable Goods	2,627,238	2,778,723	889,376	860,471	-5.5	2.1	13.7
Apparel	161,288	156,652	54,609	55,291	3.0	5.7	40.3
Drug Stores	125,149	136,563	41,118	40,828	-8.4	-0.7	1.5
Eating and Drinking Places	469,868	473,673	152,696	157,094	-0.8	-1.4	11.9
Food Group	1,043,221	1,160,013	353,183	350,169	-10.1	2.9	11.1
Service Stations	160,401	171,149	55,553	49,092	-6.3	2.1	1.0
General Merchandise Group	478,174	470,790	168,221	148,859	1.6	1.5	21.8
Total Retail Trade	4,186,785	4,231,577	1,336,743	1,271,931	-1.1	-5.3	0.7

[a]Total includes data for categories not shown in the table.

RETAIL TRADE IN SELECTED CITIES
($000)

Retail Trade	3 Mos. '88 Adjusted	3 Mos. '87 Adjusted	Mar. '88 Adjusted	Mar. '88 Unadjusted	Percentage Change 3 Mos. '88/'87 Adjusted	Percentage Change Mar./Feb. '88 Adjusted	Percentage Change Mar./Feb. '88 Unadjusted
Ada	39,466	39,955	12,877	12,419	-1.2	-3.3	3.0
Altus	36,374	35,356	10,657	10,292	2.9	-16.8	-11.0
Alva	11,024	10,672	3,406	3,189	3.3	-11.7	-8.9
Anadarko	13,950	12,695	4,373	4,277	9.9	-6.0	1.6
Ardmore	56,841	53,778	18,097	16,703	5.7	-2.9	0.5
Bartlesville	55,930	55,428	17,582	16,622	0.9	-5.4	-2.4
Blackwell	10,740	8,595	3,842	3,718	25.0	18.5	28.6
Broken Arrow	56,338	52,086	17,188	16,632	8.2	-10.3	-1.4
Chickasha	26,955	25,596	8,213	7,986	5.3	-12.4	-5.5
Clinton	19,187	17,787	5,593	5,225	7.9	-17.5	-15.3
Cushing	15,353	15,093	4,904	4,931	1.7	-4.8	8.9
Del City	31,211	36,075	9,887	9,552	-13.5	-3.1	0.8
Duncan	41,940	37,978	13,237	12,583	10.4	-9.5	-5.3
Durant	32,324	27,681	10,235	9,235	16.8	-2.9	-1.8
Edmond	72,246	67,276	20,859	20,473	7.4	-19.8	-13.1
Elk City	21,951	20,364	6,437	6,123	7.8	-19.3	-14.4
El Reno	21,714	21,336	6,167	6,042	1.8	-20.8	-16.0
Guthrie	15,380	14,543	4,662	4,472	5.8	-17.4	-10.2
Guymon	13,054	12,916	4,045	3,815	1.1	-6.6	-1.6
Henryetta	13,906	13,110	4,569	4,396	6.1	-2.3	8.1
Hobart	6,775	6,640	2,066	1,969	2.0	-13.0	-8.5
Holdenville	7,703	7,663	2,354	2,291	0.5	-11.5	-6.1
Hugo	8,451	7,527	2,567	2,329	12.3	-4.2	-7.7
Idabel	10,457	11,041	3,338	3,213	-5.3	-6.2	-1.6
Lawton	140,840	137,487	45,812	43,826	2.4	-1.9	3.8
McAlester	30,281	27,149	9,318	8,942	11.5	-1.8	7.5
Miami	33,160	31,579	10,415	10,294	5.0	-2.3	6.1
Midwest City	102,730	95,343	31,841	31,899	7.7	-11.1	-0.1
Moore	43,322	38,856	14,127	13,697	11.5	-3.2	5.4
Muskogee	83,480	81,872	26,151	24,960	2.0	-4.4	4.2
Norman	178,282	167,067	53,830	50,280	6.7	-11.7	-11.6
Oklahoma City	795,626	765,075	240,372	230,732	4.0	-14.2	-6.4
Okmulgee	15,065	14,920	4,749	4,654	1.0	-3.0	1.8
Pauls Valley	12,122	10,670	3,845	3,574	13.6	-7.1	-7.5
Pawhuska	4,865	4,741	1,587	1,471	2.6	-5.0	-2.1
Ponca City	48,763	43,043	15,825	14,879	13.3	-0.2	7.5
Poteau	13,078	12,511	4,185	4,000	4.5	-4.8	-1.8
Sand Springs	24,422	23,721	7,562	7,438	3.0	-10.8	2.5
Sapulpa	36,249	35,041	11,057	10,802	3.4	-11.6	-4.3
Seminole	16,830	16,499	5,183	5,008	2.0	-15.8	-10.2
Shawnee	83,223	68,749	24,396	22,596	21.1	-1.5	4.0
Stillwater	74,571	68,305	23,488	21,251	9.2	-3.3	-0.8
Tahlequah	22,447	22,143	7,271	6,895	1.4	-6.0	1.8
Tulsa	721,785	679,237	233,559	224,232	6.3	-0.6	5.0
Watonga	5,008	5,014	1,629	1,533	-0.1	-7.4	-3.2
Weatherford	15,896	14,713	5,040	4,700	8.0	-4.4	-5.7
Wewoka	3,123	3,342	956	914	-6.6	-8.2	-5.4
Woodward	33,182	30,968	9,790	9,267	7.1	-13.4	-8.4
Total Selected Cities	3,177,620	3,009,236	989,143	946,331	5.6	-7.9	-1.7

ENID AND LAWTON MSAs

Category	3 Mos. '88	3 Mos. '87	Mar. '88	Percentage Change 3 Mos. '88/'87	Percentage Change Mar./Feb. '88
ENID MSA					
Employment (Number)[a]					
Labor Force	29,833	30,583	29,875	-2.5	0.5
Total Employment	27,992	27,950	28,125	0.2	0.7
Unemployment Rate (%)	6.2	8.6	5.9	—	—
Industrial Power Sales (000 Kwh)	111,629	110,219	35,554	1.3	-1.3
PERMIT-AUTHORIZED CONSTRUCTION[a]					
Residential—Single Family					
Dollar Value ($000)	90	10	90	E	—
Number of Units	1	1	1	0.0	—
Residential—Multi Family					
Dollar Value ($000)	0	0	0	0.0	0.0
Number of Units	0	0	0	0.0	0.0
Nonresidential					
Commercial ($000)	190	22	130	E	E
Industrial ($000)	0	444	0	—	0.0
Institutional ($000)	0	0	0	0.0	0.0
Nonbuilding					
Streets and Highways ($000)	1,206	396	0	204.8	0.0
All Other Nonbuilding ($000)	33	71	26	-53.0	234.2
Total Construction ($000)	1,519	943	246	61.2	E
LAWTON MSA					
Employment (Number)[a]					
Labor Force	49,441	49,542	50,025	-0.2	1.5
Total Employment	46,692	46,958	47,100	-0.6	1.0
Unemployment Rate (%)	5.6	5.2	5.8	—	—
Industrial Power Sales (000 Kwh)	45,177	44,072	15,161	2.5	-2.2
PERMIT-AUTHORIZED CONSTRUCTION[a]					
Residential—Single Family					
Dollar Value ($000)	5,007	5,551	2,007	-9.8	22.7
Number of Units	64	87	29	-26.4	45.0
Residential—Multi Family					
Dollar Value ($000)	180	400	20	-55.0	-87.5
Number of Units	6	16	2	-62.5	-50.0
Nonresidential					
Commercial ($000)	498	1,035	204	-51.9	500.0
Industrial ($000)	0	20	0	—	0.0
Institutional ($000)	1,000	0	1,000	—	—
Nonbuilding					
Streets and Highways ($000)	1,848	116	1,848	E	—
All Other Nonbuilding ($000)	0	0	0	0.0	0.0
Total Construction ($000)	8,532	7,122	5,079	19.8	177.5

[a]Includes revisions.

E = exceeds 600 percent.

MUSKOGEE MA

Category	3 Mos. '88	3 Mos. '87	Mar. '88	Percentage Change 3 Mos. '88/'87	Percentage Change Mar./Feb. '88
Employment (Number)[a]					
Labor Force	31,990	33,367	31,950	-4.1	-0.2
Total Employment	28,858	30,292	28,950	-4.7	-0.4
Unemployment Rate (%)	9.6	9.2	9.2	—	—
Industrial Power Sales (000 Kwh)	43,971	47,584	15,030	-7.6	3.0
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	216	520	216	-58.4	—
Number of Units	2	6	2	-66.7	—
Residential—Multi Family					
Dollar Value ($000)	0	75	0	—	0.0
Number of Units	0	2	0	—	0.0
Nonresidential					
Commercial ($000)	400	5,275	400	-92.4	—
Industrial ($000)	0	20	0	—	0.0
Institutional ($000)	0	0	0	0.0	0.0
Nonbuilding					
Streets and Highways ($000)	577	385	0	49.6	—
All Other Nonbuilding ($000)	5	0	5	—	—
Total Construction ($000)	1,197	6,275	621	-80.9	7.6

[a]Includes revisions.

TULSA MSA

Category	3 Mos. '88	3 Mos. '87	Mar. '88	Percentage Change 3 Mos. '88/'87	Percentage Change Mar./Feb. '88
Employment (Number)					
Labor Force	339,333	350,500	340,000	-3.2	0.3
Total Employment	312,667	317,367	314,000	-1.5	0.2
Manufacturing	47,333	47,400	47,600	-0.1	0.6
Mining	15,067	15,000	15,000	0.4	0.7
Government	35,967	36,400	36,100	-1.2	-0.8
Wholesale and Retail Trade	69,067	69,300	69,100	-0.3	0.7
Unemployment Rate (%)	7.8	9.4	7.6	—	—
Average Weekly Earnings					
Manufacturing ($ Per Worker)	450.86	425.63	444.39	5.9	-0.5
Industrial Power Sales (000 Kwh)	521,960	484,712	170,200	7.7	-1.2
Mortgage Loans Closed ($000,000)[a]	21.7	59.6	14.0	-63.6	81.8
Bank Deposits ($000,000)[b]					
Demand Deposits	894	868	866	3.0	-0.8
Time and Savings Deposits	2,178	2,415	2,162	-9.8	-0.5
Air Transportation					
Passengers Enplaning (Number)	307,577	311,314	124,024	-1.2	33.6
Passengers Deplaning (Number)	308,445	317,300	122,451	-2.8	31.8
Freight (Tons)	4,979	3,698	1,991	34.6	40.4
Water Transportation					
Tulsa Port of Catoosa					
Tons In	147,300	108,380	50,732	35.9	-12.7
Tons Out	365,150	341,231	89,118	7.0	-34.1
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	25,070	30,317	10,943	-17.0	38.6
Number of Units	324	432	134	-25.0	28.8
Residential—Multi Family					
Dollar Value ($000)	65	9,971	0	-99.3	—
Number of Units	2	441	0	-99.5	—
Nonresidential					
Commercial ($000)	3,157	7,242	1,918	-56.4	131.8
Industrial ($000)	4,214	1,260	0	234.3	—
Institutional ($000)	750	3,446	150	-78.2	—
Nonbuilding					
Streets and Highways ($000)	14,475	4,756	7,657	204.4	17.5
All Other Nonbuilding ($000)	851	635	603	33.9	282.7
Total Construction	48,582	57,527	21,271	-15.5	36.8
General Business Index	86.7	87.6	85.9	0.0	-6.5

Note: Includes revisions.
[a]By Savings and Loan Associations. 2 Months and February data.
[b]Deposits of large commercial banks.

OKLAHOMA CITY MSA

Category	3 Mos. '88	3 Mos. '87	Mar. '88	Percentage Change 3 Mos. '88/'87	Percentage Change Mar./Feb. '88
Employment (Number)					
Labor Force	497,300	508,900	498,500	-2.3	0.3
Total Employment	467,900	474,367	470,300	-1.4	0.4
Manufacturing	46,933	47,200	47,000	-0.6	0.6
Mining	11,000	11,700	11,100	-6.0	1.8
Government	95,733	97,200	97,200	-1.5	0.9
Wholesale and Retail Trade	98,133	99,800	98,300	-1.7	0.5
Unemployment Rate (%)	5.9	6.8	5.7	—	—
Average Weekly Earnings					
Manufacturing ($ Per Worker)	465.83	443.98	462.18	4.9	-0.1
Industrial Power Sales (000 Kwh)	281,577	287,725	94,326	-2.1	-4.1
Mortgage Loans Closed ($000,000)[a]	18.5	25.9	8.2	-28.6	-20.4
Bank Deposits ($000,000)[b]					
Demand Deposits	807	945	763	-14.6	-6.0
Time and Savings Deposits	1,092	1,922	1,104	-43.2	1.2
Air Transportation					
Passengers Enplaning (Number)	329,717	332,979	131,389	-1.0	29.6
Passengers Deplaning (Number)	337,380	341,528	133,583	-1.2	33.3
Freight Enplaned (Tons)	1,394	1,593	477	-12.5	3.3
Freight Deplaned (Tons)	2,261	2,582	861	-12.4	19.6
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	27,951	33,438	14,290	-16.4	56.3
Number of Units	390	562	189	-30.6	39.0
Residential—Multi Family					
Dollar Value ($000)	100	915	0	-89.1	—
Number of Units	6	44	0	-86.4	—
Nonresidential					
Commercial ($000)	11,863	28,850	3,895	-58.9	133.9
Industrial ($000)	2,040	983	0	107.6	0.0
Institutional ($000)	4,698	1,272	1,678	269.3	-44.4
Nonbuilding					
Streets and Highways ($000)	35,272	19,333	5,552	82.4	-58.6
All Other Nonbuilding ($000)	40	482	26	-91.7	—
Total Construction ($000)	81,964	85,273	25,441	-3.9	-6.9
General Business Index	90.9	86.7	88.4	4.8	-5.0

Note: Includes revisions.
[a]By Savings and Loan Associations, 2 months and February data.
[b]Deposits of large commercial banks.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director*; Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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Business Highlights

Neil J. Dikeman, Jr.

Oklahoma's economic situation at the end of the first quarter of 1988 showed some evidence of improvement over the same period last year but not to the extent that many had hoped for. There were some sectors of the economy that showed moderate gains over last year while others continued below year ago levels. Thus, it's safe to say that while economic recovery may be near at hand, it hasn't arrived as yet.

Employment

Employment increased for the second successive month during March but, despite these recent upturns, average monthly employment for the year remained 1.2 percent below that of this time last year compared with a lag of only 1.1 percent in the average noted in February. The March increase in employment was shared by all economic sectors except manufacturing which was off the February total by 1.1 percent. However, for the year to date the level of employment remained about 700 jobs higher than was the case at this time a year ago.

A comparison of average monthly employment by economic activity during the first three months of this year with that of the same period of 1987, revealed that only the service trades and manufacturing enjoyed increases. These gains were, however, relatively small and therefore were more than offset by losses of 3.3 percent in mining, 7.9 percent in construction, 2.8 percent in retail trade, 0.5 percent in government and 1.8 percent in all other economic sectors.

The lag in average monthly employment during this year was overshadowed by an average decline of 43,000 job seekers in the work force thereby causing the number of unemployed to decline by 9,000 persons and the average monthly unemployment rate to reach 7.1 percent which was the lowest for at least the past two years.

Retail Sales

The lag which has been noted in retail sales from year ago levels became more evident during March than was the case in earlier months of the year. Where, at the end of February, the dollar sales for the year were only 0.3 percent less than for a comparable period last year, the difference at the end of the first quarter of this year had grown to 1.1 percent. The increase in the margin between this year's sales volume and that of the first quarter of 1987 was caused by a less than expected increase in sales during March which, after seasonal adjustment, were more than 5 percent below February at a time when a 6 percent increase was expected. Some portion of the reticence on the part of consumers to make purchases during March was undoubtedly caused by the uncertainty of the impact the revised income tax codes would have on their pocketbooks. It is generally expected that seasonally adjusted April sales, too, will be less than expected because of this uncertainty as well as the actual impact of the new tax levies.

The quarterly drop in the total volume of sales was due to a decline of 5.5 percent in non-durable goods purchases which more than offset the 7.3 percent increase in sales of durable merchandise lines. The principal culprit among the non-durable lines was grocery store sales which were off 1987 levels by more than 10 percent although a decline of 8.4 percent in sales of drug stores and one of 6.3 percent in sales at service stations also contributed to the size of the decline.

Had it not been for increases in sales of the automotive group which registered a 9.6 percent increase over the first quarter of last

year; hardware stores which enjoyed a 9.2 percent rise and furniture and appliance sales which were 5.8 percent more than at this time a year ago, the gap between sales thus far in 1988 and those of 1987 would have been significantly larger. Unfortunately, past experience indicates that these merchandise lines are ones which are generally most heavily impacted during tax paying time in April.

Geographically, total sales for the first quarter in the five larger trade centers were 5.3 percent ahead of 1987 despite a drop of 8.4 percent during March. This increase extended both to urban and rural merchants located in these centers. Sales in the remainder of the State, however, were 12.6 percent below the level of last year due principally both to the predominance of non-durable goods merchants in the areas outside the five large centers and the apparent decline in population of many of the counties in these non-metropolitan areas.

Construction

Construction activity during the first quarter of the year as measured by the dollar volume of building permits issued increased over the year ago level by 4.5 percent to register the first such increase since 1984. This gain was triggered by sharp increases in all types of construction activity during March except in multi-family dwellings and industrial buildings. However, despite these latter losses which, in themselves, were sizeable, total construction activity in March was 54.2 percent ahead of February. This boost was of enough significance to offset the decrease experience in February thus providing the impetus for the quarterly gain over the same period of 1987.

Finance

The financial picture in Oklahoma remains somewhat clouded as deposits in all financial institutions in the state declined by 0.1 percent in March thus marking the second successive monthly decline in this important indicator this year. Because of these recent decreases, the average monthly deposits for the first quarter of the year were 4.2 percent less than at the same time last year as savings deposits were down by 5.6 percent while demand account totals were up by only 0.4 percent.

The activities of thrift institutions, on the other hand, presented a mixed picture as an increase in assets during March reversed the February downturn thereby raising the total for the year 2.9 percent above the level during the same period of 1987. Conversely, however, the March increase of nearly 36 percent in mortgage loans closed was not sufficient to overcome the lags earlier in the year and as a result, the total for the first three months was 46.3 percent less than at this time a year ago.

Manufacturing

Both indicators of manufacturing activity (i.e. manufacturing employment and industrial power sales) declined in March but this drop was not sufficient to offset the increases which occurred earlier in the year. Thus, for the first quarter of 1988, average monthly manufacturing employment exceeded the average for the same period last year by 0.5 percent (approximately 700 jobs) while industrial power sales for the period were nearly 5 percent ahead of last year. In addition, average weekly wages paid to employees in manufacturing activities rose by nearly $11 per worker over the first quarter of 1987 at a time when average weekly hours worked by these employees dropped which indicates that average hourly wages rose by nearly 4 percent. This, in turn, provides some evidence that the demand for manufacturing workers is beginning to increase.

Crude Oil and Natural Gas Production

Production of crude oil and natural gas in Oklahoma thus far this year have both registered decreases from the same period a year ago. Natural gas (including casinghead gas) output during the first quarter was 2.2 percent below the same period last year while crude oil production, which has declined rather steadily in recent years, continued this pattern and fell below last year's total by nearly 2 percent. Much of the decline in crude oil production can be attributed to the uncertainty in oil prices which have been prevalent during the past 15 months. However, the drop in natural gas production from year ago levels is due less to pricing policies than to demand, particularly that of residential and commercial customers.

Personal Income

Personal income (in terms of current dollars) continued to move upward in March so that by the end of the third quarter it exceeded the level of the same period a year ago by 3.4 percent. However, as encouraging as this upward movement seems, the recent increases have remained less than the national rate of inflation so that in terms of real income, the level for the quarter was 1 percent below that of the same period a year ago.

It should be noted that there is considerable question as to whether Oklahoma consumers are impacted by the same inflationary forces as are noted in other parts of the nation. The fact that no Oklahoma communities are included in the regular consumer price surveys conducted by the Bureau of Labor Statistics (on which the Consumer Price Index is based) strongly suggests that prices in Oklahoma may not reflect the rate of inflation noted elsewhere. Some further evidence that this is the case can be found in consumer price indices developed for a number of cities throughout the nation by the American Chamber of Commerce Researchers Association. This price index series includes Oklahoma City and Tulsa, both of which reported cost of living indices which were somewhat below that of the nation

for the first quarter of the year thus suggesting that possibly the recent increases in personal income in Oklahoma may in fact have exceeded increases in inflation.

General Business Index

The combination of the changes in the economic sectors discussed earlier in this report with changes in such other factors as the decline in bankruptcies and bank closings, an increase in sales of manufactured goods to mention a few resulted in an increase of 0.2 percent in the General Business Index of Oklahoma in March. This increase was the fourth such gain since the November 1987 decline and raised the average index for the year to date to 95.5 which was 3.6 percent higher than for the same period a year ago.

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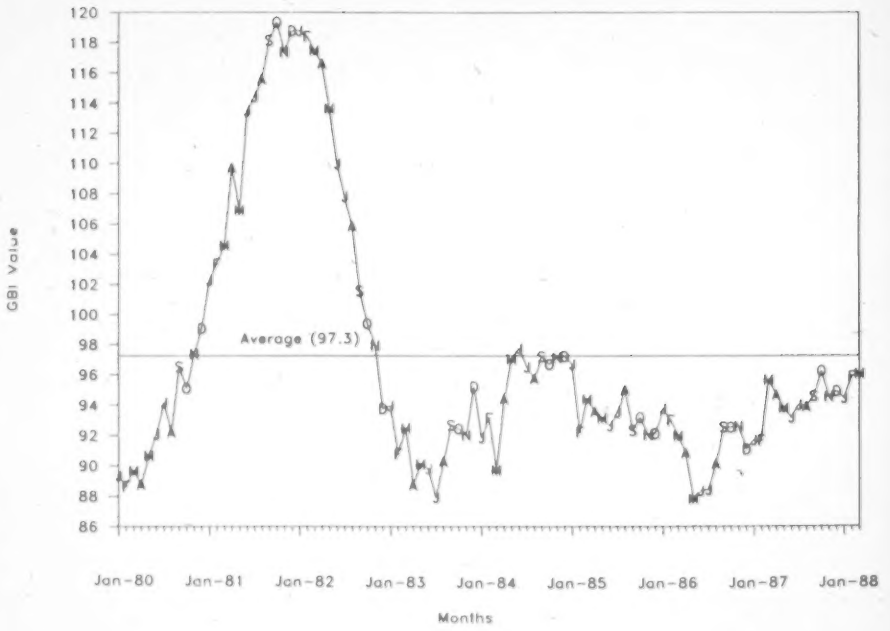
Oklahoma State General Business Index
January 1980 through March 1988



Are Middle-Paying Jobs Really Declining?

Garland R. Hadley
Mike C. Patterson

Introduction

For several years economists and politicians have been concerned about the types of new jobs being created in the United States. Some observers argue that structural changes in the U.S. economy are leading to a bipolarization of earnings — that is, middle paying jobs are decreasing relative to higher and lower paying jobs. In an article in the *Atlantic Monthly* Bob Kuttner argued that as the U.S. economy shifts away from its traditional manufacturing base to high-technology and service industries, the share of jobs providing a middle-class standard of living is shrinking.[1]

A few months later two economists, Barry Bluestone and Bennett Harrison, published the results of an empirical study prepared under contract to the Joint Economic Committe of the U.S. Congress suggesting that the percentage of newly created jobs paying low wages has been rising dramatically. It was concluded, "that 58 percent of all net new employment between 1979 and 1984 paid annual wages of less than $7,000."[2] While the Bluestone-Harrison report has been criticized for comparing data from a growth period with data collected during a severe recession,[3] it does provide data supporting the Kuttner bipolarization hypothesis.

Robert Lawrence of The Brookings Institution examined basically the same data and found that some bipolarization of earnings did occur between 1969 and 1983; however, the argument is presented that it was not structural change, but the changing age-distribution of the labor force that was primarily responsible.[4] While in another study, Neal Rosenthal of the Bureau of Labor Statistics, compared usual weekly earnings in 1973 and 1982 by using three occupational earning groups. This study did not find any significant decline of the percentage of workers in the middle earnings group. It was found that the percentage of workers in the highest paying third increased significantly, while the proportion of workers in the lowest-paying third declined.[5] These findings are, of course, contrary to the conclusions of Bluestone and Harrison, and fail to support the bipolarization hypothesis.

The purpose of this article was to re-examine the data used in the previously cited studies; however, an approach that focuses upon the actual number of jobs being created in each of three occupational pay classes rather than on the earnings of workers was employed. Also the analysis has been extended into the 1982-1985 time period.

Methodology

This study was based upon current Population Survey data on occupational employment and annual earnings. The data was divided into three distinct time periods for analysis — 1975 through 1978, 1978 through 1981, and 1982 through 1985. There were two reasons for this breakdown: First, the 1981 and earlier data are not fully comparable with the 1982 and later data because of changes in occupational definitions. Second, the breakdown provides data from three different periods of approximately the same length so that changes during three different time periods can be compared.

For each year the number of males in each occupation has been multiplied by the mean annual earnings of males and the same has been done with females. These two products were then summed and divided by the total number of people (men plus women) in that occupation to obtain the mean annual earnings per worker in each occupation per year. These

TABLE 1

Distribution of All Workers
by Occupational Pay Classes
(selected years prior to 1982)

Occupational Pay Class	Distribution of Employment					
	1975		1978		1981	
	Number (thousands)	Distribution (percent)	Number (thousands)	Distribution (percent)	Number (thousands)	Distribution (percent)
Top Third	13,941	13.6	16,017	14.4	18,286	15.6
Middle Third	52,423	51.3	57,004	51.2	59,274	50.6
Bottom Third	35,832	35.1	38,282	34.4	39,613	33.8
TOTALS	102,196	100.0	111,303	100.0	117,173	100.0

results were then used to classify the occupations into three groups — the highest paying third, the middle paying third, and the lowest paying third — each with the same number of occupations. The number of people employed in each occupation at the beginning of each time period was subtracted from the number at the ending in order to determine the number of new jobs in each occupation. These numbers were then summed to calculate the total number of new jobs being created in each pay class in each time period.

The analysis has also been extended by incorporating data from the 1982 through 1985 time period. Previous use of these data was not possible because extensive changes in occupational definitions made it virtually impossible to compare 1982 and subsequent data with those from earlier time periods.

Distribution of Workers by Occupational Pay Class

The first step was to examine the distribution of workers by occupational pay class. Table 1 shows the numeric and percentage distributions of all workers by occupational pay classes in selected years prior to 1982. These data show that the proportion of workers in each of the three occupational pay classes have remained relatively stable over the entire period from 1975 through 1981. If any significant trend exists, it is toward a slight increase in the proportion of jobs in the top third pay class and a slight decrease in the proportion of jobs in the bottom third pay class. This distribution is quite similar to the distribution found by Rosenthal using usual weekly earnings; and like Rosenthal's analysis these findings do not support the notion of bipolarization.[6] While the data show a very slight decrease (less than one percent) in the proportion of workers in the middle third occupation pay class, it is a weaker trend than either of the other two — certainly not pronounced enough to conclude that a significant redistribution is occurring.

Because of extensive changes in occupational definitions beginning in 1982, the data for 1982 and 1985 are presented in a separate table. Again, the data in Table 2 reflecting changes occurring between 1982 and 1985, show a slight increase in the percentage of workers employed in the highest-paying occupational class, no change in the middle third, and a slight decrease in the percent of workers employed in the lowest-paying third. Thus there does not seem to be any evidence in the changes occurring between 1982 to 1985 to support the contention that middle-paying jobs are declining.

Job Creation by Occupational Pay Class

The second part of this study dealt with the rate at which new jobs are created in each occupational pay class. To accomplish this analysis the occupational data were sorted by mean earnings at the beginning of the time period, and based upon this sort, the occupations were divided into three classes which were then held constant. Data were accumulated on the number of new jobs being created in each of these three occupational pay classes over time.

TABLE 2

Distribution of All Workers
by Occupational Pay Classes
(1982 and 1985)

Occupational Pay Class	Distribution of Employment			
	1982		1985	
	Number (thousands)	Distribution (percent)	Number (thousands)	Distribution (percent)
Top Third	29,302	25.1	32,786	26.5
Middle Third	32,608	28.0	34,741	28.0
Bottom Third	54,643	46.9	56,417	45.5
TOTALS	116,553	100.0	123,944	100.0

TABLE 3

Net Jobs Created by Occupational Pay Class and Annual Rate of Job Creation (three recent time periods)

Occupational Pay Class	1975-1978		1978-1981		1982-1985	
	Jobs Created (thousands)	Average Rate of Change (percent)	Jobs Created (thousands)	Average Rate of Change (percent)	Jobs Created (thousands)	Average Rate of Change (percent)
Top Third	2,076	8.0	2,269	4.7	3,484	4.0
Middle Third	4,581	2.9	2,270	1.3	2,133	2.2
Bottom Third	2,450	2.3	1,331	1.2	1,774	1.1
TOTAL	9,107	3.0	5,870	1.8	7,391	2.1

Table 3 shows the results of this analysis. The number of net new jobs created during each of three time periods by pay class is shown, as is the average annual growth rate of new jobs in each pay class during each time period. Again these data show that the highest average annual rates of job creation tend to be in the top third occupational pay class. Growth rates range from 4 to 8 percent per year. The middle third occupational pay class grew at a slower but still positive rate. In the 1975-1978 period, jobs increased at nearly 3 percent per year. The rate of job creation slowed to 1.3 percent per year in the 1978-1981 time period as the national economy sank into recession, and the average annual growth rate increased again during the 1982-1985 economic recovery. The slowest rates of job creation in all three time periods were in the bottom third occupational pay class. The rate at which new jobs are being created in the lowest pay class fell from an average annual rate of increase of 2.3 percent in the 1975-1978 period to 1.1 percent in the 1982-1985 period.

Again this more detailed analysis of the rates of job creation does not support the hypothesis of bipolarization. The trends identified in the data in Tables 1 and 2 seem to become more pronounced in this analysis. New jobs in the top pay class are increasing at a greater rate than in the other two occupational pay classes. Jobs in the lowest paying occupations are growing at a slower rate than jobs in better paying occupations.

Summary and Conclusions

This article examined the underlying data concerned in current debate as to whether structural changes in the U.S. economy are causing a decline in middle paying jobs resulting in a bipolarization of earnings. Two types of analyses were used. First, the distribution of workers by occupational pay class in selected years was examined. This analysis did not reveal any significant distributional changes to support the bipolarization hypothesis. Second, the rates at which new jobs were being created over three time periods were examined by occupational pay class. Again, this analysis failed to yield any support for the bipolarization hypothesis.

The implications of this analysis are that the United States economy is continuing a well-established pattern of economic growth that includes secular improvements in productivity and income. The growth of employment in the service sector relative to manufacturing seems to be creating new jobs in all occupational pay classes — indeed if anything, this change is accompanied by higher rates of job creation in high-paying occupations than in low-paying occupations.

Notes

[1]Bob Kuttner, "The Declining Middle," *Atlantic Monthly* (July 1983), pp. 60-72.

[2]Barry Bluestone and Bennett Harrison, *The Great American Job Machine: The Poliferation of Low-Wage Employment in the U.S. Economy* (Washington, D.C.: Joint Economic Committee of Congress, December 1986).

[3]Warren T. Brooks, "Low Pay Jobs: The Big Lie," *Wall Street Journal* (March 25, 1987), p. 26.

[4]Robert Lawrence, "Sectoral Shifts and the Size of the Middle Class," *The Brookings Review* (Fall 1984), pp. 3-11.

[5]Neal H. Rosenthal, "The Shrinking Middle Class: Myth or Reality?" *Monthly Labor Review* (March 1985), pp. 3-10.

[6]*Ibid.*

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The Economic Impact of Sooner Football

Neil J. Dikeman, Jr.

Introduction

A study was recently conducted by the Center for Economic and Management Research at the University of Oklahoma concerning the financial contributions made by the University's football program to the economy of the Norman-Oklahoma City area. The results of this project indicated that the study area receives an average of nearly $4.8 million per game from attendees at games played in Norman. It further indicated that regular attendees at these games came from such states as Texas, Kansas, Louisiana, Colorado and Arizona in addition to the Oklahoma followers of OU football.

The data on which this study was based were obtained by a sample survey of persons who regularly purchase home-game tickets from the University of Oklahoma Athletic Ticket Office regardless of the state in which these customers live. It should be noted, however, that the findings of this study do not include the contributions of the nearly 10,000 students who regularly attend the games.

Attendance

In recent years, an average of 65,741 OU football tickets per game are sold to the public. Over 10 percent of these sales are made to residents of such states as Texas, Kansas, Arkansas, Colorado, Arizona, Louisiana and New Mexico. The remaining 90 percent are purchased by Oklahomans of which 14.5 percent are sold to Norman-Oklahoma City area residents (including Norman, Moore, Oklahoma City and other communities in the Oklahoma City MSA) and 75.5 percent to persons outside the immediate Norman area. Thus, a vast majority of persons attending the games come from areas which are some distances away from Norman and thereby create new income to Norman-Oklahoma City Area merchants. With regards to frequency of attendance, 75 percent attend all home games, 24 percent attend an average of three games per season and one percent attend no games regularly but allow others to use those tickets the subscribers do not use. Finally, the average number of persons attending the games as a group is two, this suggests that a total of 32,870 groups annually attend each game. These ratios are translated into numbers of attendees in Table 1.

Activities of Attendees

Attendees at the home games tend to arrive at various times prior to the games as is witnessed by the fact that one percent of those who attend games, arrive in the area on or before the Thursday preceeding the game while eight percent arrive on Friday and 91 percent arrive on Saturday.[1]

Also, of those who arrive on Saturday, 25.3 percent arrive by 10 a.m.; 54.8 percent arrive by noon and 10.9 percent arrive just before game time. When asked when they began their trip home, 49.8 percent of all attendees leave for home immediately following the game; 42.6 percent leave later Saturday evening and 7.6 percent leave on Sunday or later.

The above ratios indicate that 16.6 percent of the attendees at the home games remain at least one night in the area. Of these, 9.2 percent stay in hotels and motels, 5.8 percent stay with friends or relatives, 1.2 percent stay in motor homes or trailers and 0.4 percent stay in other types of accommodations. When asked where they eat on game day, 15.5 percent eat before coming to Norman, 16.4 percent bring their lunch, 16.2 percent eat in the Stadium, 46.6 percent eat in Norman restaurants (including fast food places) and 5.3 percent eat in friends' or relatives' homes. After the games, however, 38.0 percent eat at home, 24.6 percent eat outside of

TABLE 1

Average Annual Attendance at Home Football Games of the University of Oklahoma

Item	Percent of Total Attendees	Average Number of Attendees Per Game	Average Number of Groups Per Game
Out of State Attendees	10.1	6,640	3,320
Norman Area Attendees[a]	14.5	9,532	4,766
Other Oklahoma Attendees[b]	75.4	49,569	24,784
Total Attendees	100.0	65,741	32,870
Attend All Games	75.1	49,371	24,685
Attend an Average of 3 Games[b]	23.9	15,712	7,856
Attend no Games[b]	1.0	658	329
Total	100.0	65,741	32,870

[a]Norman area includes Oklahoma, Cleveland, McClain, Canadian, Logan and Pottawattomie Counties.

[b]Assuming that the tickets purchased by those who regularly attend only three home games and/or no home games are used by others and that these users spend only one day in Norman.

TABLE 2

Activities of Attendees at Home Football Games of the University of Oklahoma

Item	Percent of Attendees	Number of Attendees	Number of Groups
Arrival			
Thursday or Before	1.0	658	329
Friday	8.0	5,259	2,630
Saturday	91.0	59,824	29,912
Before 10 a.m.	25.3	16,632	8,316
By Noon	54.8	36,026	18,013
Just Prior to Kickoff	10.9	7,266	3,633
Departure			
Immediately after Game	49.8	32,739	16,370
Later Saturday	42.6	28,006	14,003
Sunday or Later	7.6	4,996	2,498
Lodging Accommodations			
Remain at Least One Night[a]	16.6	10,913	5,456
Stay in Hotels or Motels	9.2	6,048	3,024
Stay with Friends or Relatives	5.8	3,813	1,906
Stay in Motor Home	1.2	789	394
Stay in Other Accommodation	0.4	263	132
Eating Accommodations (Before Game)			
Eat before Coming	15.5	10,190	5,455
Bring Lunch	16.4	10,781	5,391
Eat in Stadium	16.2	10,650	5,325
Eat with Friends or Relatives	5.3	3,484	1,742
Eat in Norman Restaurants	46.6	30,636	15,318
Eating Accommodations (After Game)			
Eat at Home	38.0	24,982	12,491
Eat on Way Home	24.6	16,172	8,086
Eat with Friends or Relatives	4.6	3,024	1,512
Eat in Norman Restaurants	32.8	21,563	10,782
Shopping Practices			
Shop in Norman	67.8	44,572	22,286
OU Novelty Shop	33.0	21,694	10,847
Campus Corner	28.6	18,802	9,401
Sooner Fashion Mall	5.2	3,418	1,709
Other Norman Shops	1.0	658	329

[a]The average stay for all Attendees was 1.34 nights.

Norman while on their way home, 4.6 percent eat with friends or relatives and 32.8 percent eat in Norman restaurants.

Finally, when asked if they shopped in Norman, 67.8 percent of the attendees responded affirmatively and 32.2 percent stated that they did not shop in Norman. Of those who shop in Norman, 33 percent stated that they shopped in the OU Novelty Shop, 28.6 percent shopped at the Campus Corner, 5.2 percent shopped at the Sooner Fashion Mall and one percent shopped elsewhere in Norman. Table 2 records a translation of these ratios to numbers of attendees.

Expenditures of Attendees

The range of expenditures per group attending home football games was from nothing for those who live in the Norman area and do not eat meals nor seek entertainment in Norman to $2,000 for those who arrive in Norman before Saturday and do not leave before Monday with an average expenditure of $85 per group per game. A breakdown of these expenditures by purpose of expenditure indicates that 35.3 percent was spent for lodging, 27.1 percent for food and beverages, 11.8 percent for transportation (including parking costs), 8.1 percent for entertainment (excluding the cost of football tickets) and 17.7 percent for shopping. The results of applying these data to those of Tables 1 and 2 are shown in Table 3.

TABLE 3

Average Per Game Expenditures of Attendee Groups[a] (dollars)

Item	Expenditure
Lodging	$ 986,100
Food and Beverages	756,010
Transportation	328,700
Entertainment	230,090
Shopping	493,050
Total	$2,793,950

[a]At home football games at the University of Oklahoma by purpose of expenditure.

Translating the per game expenditures in the Study Area of attendees at the home football games into total annual income generated by these games indicates that, over a full season, these games generate the amount of $13,969,750 in direct income to the area. However, due to the multiplier effect, these activities create additional income for other businesses in the Study Area who provide goods and services to the hotels, motels, restaurants, shops and other enterprises in which expenditures are made by attendees of $9,918,520. This means that the OU football games played in Owen Stadium generate directly and indirectly an average of $23,888,270 annually in new income to the economies of the Study Area over a five game season.

Note

[1]It was assumed that those attendees using tickets of persons who do not attend or who do not attend a particular game arrive on Saturday.

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